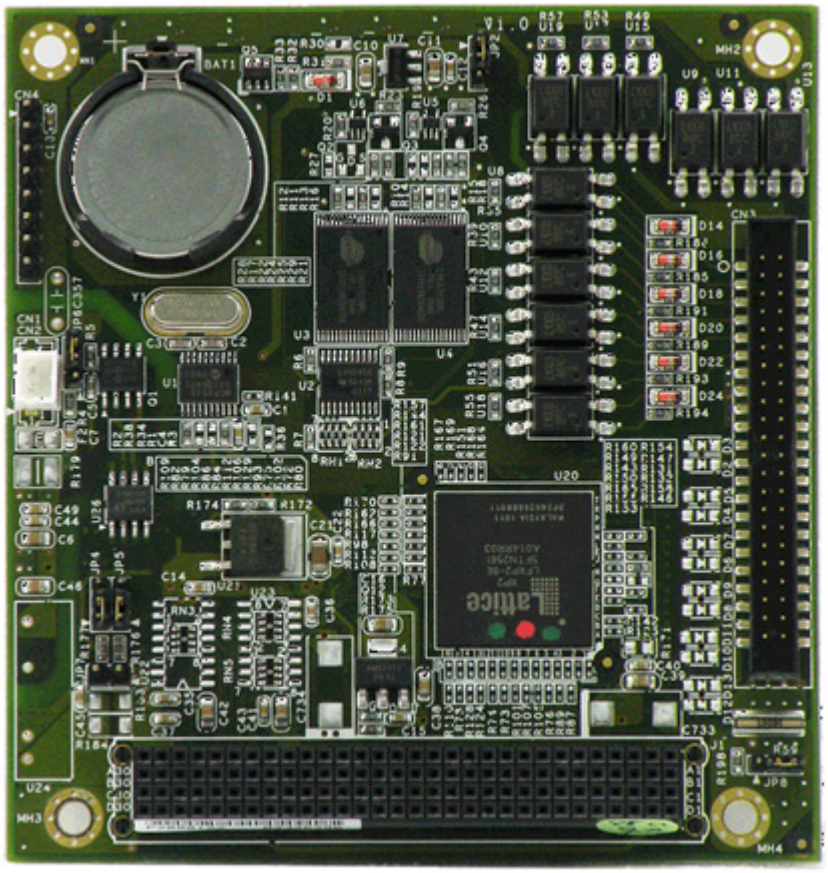

39.00 EUR
incl. 19% VAT, plus shipping

- CAN Bus !
- 12 channel I/O !

**Support:** Technical Notes

CAN-BUS PCI-104 controller card for FleetPC-3 (not -B !).

| | |
|---|---|
| | PCI104 digital I/O, SRAM disk & CAN bus module |
| PCB | 4-layer PCB |
| **General** | |
| Bus interface | PCI 104, PCI 2.0 compliant |
| Controller | FPGA & Standalone CAN controller |
| SRAM disk | - 2 x 512KB low power SRAM<br>- 1M Byte as one bank<br>- Battery backup by optional module<br>- Battery power consumption: less than 15uA<br>- Operation modes:<br>A. Memory Mode<br>i. Independent mode<br>ii. Replicate mode<br>B. Disk Mode (is only supported in Linux)<br>C. Mode selection through Jumper (factory default disk mode) |

| | |
|---|---|
| Digital Input | - 12 channels<br>- Internal pull up<br>- Programmable de-bounce time (0 ms to 255ms, 1 ms resolution). True after X ms of constant state.<br>- Support Change of State interrupt<br>- 5000Vrms optical isolation<br>- Response time: 20uS (without de-bounce)<br>- Rising trigger or falling trigger<br>- Suggested maximum input frequency 10KHz( duty = 50% ).<br>- Signal input :<br>A. Open/Ground switch input<br>B. Digital Logic<br>i. Logic High: 3V to 28V<br>ii. Logic Low: 0V to 1.5V |
| Digital Output | - 12 channels<br>- Output Type: Open drain MOSFET driver<br>- Output voltage range: 5V to 30V<br>- Sink Current: maximum 500mA each channel<br>- Power on initial state: MOSFET off<br>- Support pulse generator :<br>A. Programmable cycle time, duty cycle and number of cycles. User defines on and off periods (maximum 8-bit for on and off period value).<br>B. Maximum 65535 cycles<br>C. RUN & STOP command<br>D. Resolution: 1 ms, 100ms and 1 second |
| Timer | - 12 x independent 16-bit timers<br>- Support Time Out Interrupt<br>- Resolution: 1 ms and 100ms second(Resolution: 1ms, and 100ms) |
| Counter | - 12 x independent 16-bit counters<br>- Connect to all digital inputs<br>- Operation Mode:<br>a. Count to number interrupt.<br>b. Read and clear<br>c. Read on the fly<br>d. Auto stop counting after programmable constant state interval(Interrupt active after programmable constant state interval Resolution: 1ms, and 100ms)<br>e. Count over to target interrupt. |
| CAN bus | - Connect to FPGA SPI bus<br>- 1 x CAN bus<br>- 2KV isolation<br>- CAN 2.0B Active protocol<br>- Controller: Microchip MCP2515(Industrial grade -40 to 85'C)<br>- Transceiver: Micro chip MCP2551(Industrial grade -40 to 85'C) [Other Transceiver manufacturers: Philips, TI, Maxim, ST, Infineon, Atmel]<br>- 2 pin JST connector(2 pin JST 2.0mm connector )<br>- Programmable baud rate: from 5K bps Maximum 1M bps or user-defined baud rate<br>- Time stamp of CAN message<br>- API library for user development<br>- CAN bus device status query |
| Power input | From PCI 104 |

| | |
|---|---|
| Maximum card | Maximum 2 cards can be stacked up in one system |
| Jumper | - INT# & ID select. Please see Appendix.<br>- SRAM chip capacity select (Used for when auto detection doesn't work only) |
| Digital I/O connector | - 44 pin 2.0 mm pitch 180 degree with box<br>- Pin Assignment: Appendix 3(Pin assignment modify) |
| Software | - Windows XP, XPe and Linux device driver and API<br>- Windows XP, XPe and Linux demo program<br>- User interface for DIO, SRAM and CAN bus in Linux and Windows XP embedded |
| **Mechanical** | |
| Dimensions | 90.17 x 95.89mm (3.55"x3.775") |
| Operating temperature | -20oC to 70oC (-1~158oF) without air flow |
| Storage temperature | -20~85oC (-4~185oF) |
| Relative Humidity | 0 to 90% @ 40°C, non-condensing (95% @ 40°C, Non-Condensing by request) |
| **Scope of supply** | |
| 1x | PCI 104 Controller card |
| 1x | 150mm Digital I/O cable |
| 1x | 150mm 2-wire cable for CAN bus |